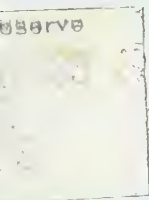


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Public Law 88 - 206

as amended



THE CLEAN AIR ACT

An Analytical Discussion

January 1978

Forest Service
U.S. Department of Agriculture
Washington, D.C.



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nd Fire Management Washington, D.C. ent information

In preparing this report, the authors drew upon much of the information first reported in "An Analysis of the Clean Air Act and Related Federal Regulations" by William L. McCleese, Roy W. Feuchter, Walter A. Hough, Gerald W. Anderson, and Harvey V. Toko and published by the Forest Service in June 1976 as an interim report. "The Clean Air Act: An Analytical Discussion" replaces the earlier analysis which became out of date with the enactment and signing of PL 95-95.

UNITED STATES DEPARTMENT OF AGRICULTURE
FOREST SERVICE

WO

REPLY TO: 2120 Air Quality

MAR 1 1978

SUBJECT: The Clean Air Act
An Analytical Discussion


TO: Regional Foresters, Station Directors, Area
Directors, and WO Staff



The Clean Air Act, PL 88-206 as amended, is the primary legislative tool for improving and maintaining air quality in the United States. Many requirements of the Act apply to Forest Service management activities.

This analysis will help to provide Forest Service employees with a basic understanding of the Clean Air Act and its relationships to our activities. This report is an analysis of the law and not a legal opinion. Specific points of the law must be interpreted on a case by case basis using the Act itself and/or the assistance of the Office of the General Counsel.

The booklet, "An Analysis of the Clean Air Act and Related Federal Regulations," dated June 1976 is no longer applicable. It is, therefore, superseded by this analysis.


JOHN R. MCGUIRE
Chief

Enclosure

Limited Distribution

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#b An Analytical Discussion A/A)

by

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January 1978



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INTRODUCTION AND BACKGROUND

This analysis of the Clean Air Act, its amendments, and related Federal regulations was made to --

- Identify the effects of the Act on the Forest Service
- Serve as a basis for evaluating future amendments and regulations
- Provide a foundation for developing air quality management objectives and policy

The analysis provides a framework of knowledge and should not be substituted for the Act itself when legal requirements are being determined. Copies of the Clean Air Act can be obtained from Regional Offices of the Environmental Protection Agency (EPA). Further help can be obtained from the EPA Regional Office for your area and/or from State and local air pollution agencies.

State and local governments have regulated air pollution sources for many years. While these controls were often effective in dealing with air pollution problems within political boundaries, the complexity of dealing with problems where multiple jurisdictions were involved became unmanageable.

Federal legislative activity started with the establishment of an air pollution research program in 1955. In 1963, concern for the increase in and complexity of air pollution brought about by urbanization, industrial development, and the increasing use of motor vehicles prompted enactment of the Clean Air Act (PL 88-206).

Congress recognized that the prevention and control of air pollution at its source are the primary responsibilities of the State and local governments, but the growth of metropolitan and industrial areas across political boundary lines was creating jurisdictional problems that reduced the effectiveness of local programs to prevent and control air pollution. Federal financial assistance and leadership were thought to be essential in the development of cooperative Federal, State, Regional, and local programs.

The Clean Air Act, and its amendments through 1974, were designed to achieve four major objectives:

- To protect and enhance the quality of the Nation's air resources in order to promote the public health and welfare

- To initiate and accelerate a national research and development program in order to achieve the prevention and control of air pollution
- To provide technical and financial assistance to State and local governments in connection with the development and execution of their air pollution prevention and control programs
- To encourage and assist the development and operation of regional air pollution control programs

The 1970 amendments to the Act required the Administrator of the Environmental Protection Agency to identify air pollutants that have adverse effects on public health and welfare and to establish primary and secondary National Ambient Air Quality Standards for each identified pollutant. Each State is required to develop a plan for maintaining air quality within these National Standards.

The air space of the United States is divided into air quality control regions for the purposes of planning, administration, and control of air pollution. These regions encompass areas of similar characteristics and influences. For those regions where any National Ambient Air Quality Standard is exceeded, or any Standard is expected to be exceeded in the next 10 years, the States are required to implement plans for bringing air quality within the Standards in a specified period of time.

As might be expected, the primary emphasis of EPA and the States has been on reducing pollution from major sources such as heavy industry, coal-fired power plants, and motor vehicles. A major effort was made to reduce pollution significantly from these sources by 1975.

As progress was made in cleaning up the air over industrial and urban areas, public attention began to shift to other areas. In 1972, the Sierra Club filed suit which led to a court order requiring the Administrator of EPA to disapprove all State air quality control plans that did not contain provisions for preventing significant deterioration of air quality in any portion of any State where air quality is superior to National Standards. The protection of aesthetic, scenic, and recreational values in rural areas was of particular concern.

In response to this suit, EPA issued regulations in December 1974 that set up a mechanism for preventing significant deterioration of air quality in areas where air pollution levels are currently below the National Standards.

In 1977, the Clean Air Act was again amended. The amendments were intended to achieve several additional objectives:

- To provide a greater role for State and local governments in the administration of the Clean Air Act
- To provide express recognition of the economic and energy factors which should be considered
- To establish uniform bases and procedures for standard setting
- To provide more effective surveillance and enforcement tools
- To extend certain deadlines under the Act
- To provide appropriate employee protection
- To insure more effective and informed public involvements in air quality decisionmaking
- To provide legislative guidance and clearer legislative intent to the prevention of significant deterioration of air quality over National Parks, Wildernesses, National Monuments, etc.

States have been given increased responsibility to manage air quality including the redesignation of air quality as they deem appropriate except for specific Federal areas.

The Act now requires an economic analysis in the promulgation of a review of standards of performance, regulations, or emission standards. These economic analyses must include a section on the effects of energy use.

Automobile emissions compliance deadlines have been extended. Employee protection is specifically provided. Public involvement is required for significant actions required under the Act.

The 1977 amendments replaced the EPA regulations that set up the original mechanism for the prevention of significant deterioration. Air quality classes have been specified and certain Federal areas designated for protection under them. In addition, the protection of visibility over National Parks and Wildernesses has been declared a national goal.

-NOTES-

ANALYSIS OF THE CLEAN AIR ACT

This analysis is based on the Clean Air Act, as amended ^{1/}, and includes the sections of the Act pertaining to Forest Service programs in National Forest Systems, State and Private Forestry, and Research.

TITLE I - AIR POLLUTION PREVENTION AND CONTROL

PART A - AIR QUALITY AND EMISSION LIMITATIONS

Cooperative Activities and Uniform Laws (Section 102). All Federal departments and agencies with air pollution prevention and control responsibilities are required to cooperate to assure utilization of all available facilities and resources. State and local governments are urged to cooperate in air pollution control activities.

Research, Investigation, Training, and Other Activities (Section 103). To develop a program for prevention and control of air pollution, agencies must cooperate in collecting and disseminating basic data on chemical, physical, and biological effects of pollutants. Federal agencies must also coordinate research activities that are designed to investigate short- and long-term effects on air pollutants on public health and welfare.

Air Quality Control Regions (Section 107). Each State has responsibility for assuring air quality within its borders and for establishing air quality control regions for all areas within the State. By November 29, 1977, (120 days after enactment) each State shall identify air quality control regions that do not meet primary National Standards and that have ambient air quality levels better than National Standards.

Air Quality Criteria and Control Techniques (Section 108). To facilitate establishment of primary and secondary National Ambient Air Quality Standards, lists of air pollutants that have an adverse effect on public health and welfare will be published. Air quality criteria

^{1/} The Clean Air Act of 1963 (PL 88-206) was amended in 1965 (PL 89-272), 1966 (PL 89-675), 1967 (PL 90-148), 1970 (PL 91-604), 1971 (PL 92-157), 1974 (PL 93-319), and 1977 (PL 95-95).

for a pollutant will be issued within 12 months after the pollutant has been placed on the list. Current pollutants listed include carbon monoxide, sulfur dioxide, hydrocarbon, nitrogen oxides, suspended particulate matter, and ozone.

National Ambient Air Quality Standards (Section 109). Regulations prescribing primary and secondary National Ambient Air Quality Standards will be promulgated for each listed air pollutant. Primary National Standards are necessary to protect public health. Secondary National Standards are necessary to protect public welfare. A scientific review committee will be appointed. By 1980, this committee will review primary and secondary standards criteria and recommend to EPA any revisions that are necessary. The committee will also advise EPA of the relative contribution to air pollution concentrations of *natural activity* as well as man's activity.

Implementation Plans (Section 110). Each State will submit a plan for implementing, maintaining, and enforcing primary and secondary National Ambient Air Quality Standards for listed air pollutants. State plans may include a review program for indirect sources; however, the Administrator of EPA has authority to implement and enforce regulations dealing with indirect sources owned or operated by the Federal Government. "Indirect source" means a facility (i.e., parking lot), structure, road, or highway that attracts mobile sources of pollution.

Primary National Standards should be attained as expeditiously as practicable, but in any case they must be attained within 3 years from the date of the plan's approval. The Clean Air Act also requires that secondary National Standards be attained within a reasonable time. If a State fails to submit a plan, or if a submitted plan is unsatisfactory, EPA will prepare and publish a proposed implementation plan for the State. By August 1978, and then annually thereafter, EPA will publish the current implementation plan for each State.

Standards of Performance for New Stationary Sources (Section 111).

A "stationary source" is any building, structure, facility, or installation that emits or may emit any air pollutant.

EPA will publish a list of categories of stationary sources and propose regulations establishing Federal standards of performance for new sources within such categories. New sources owned or operated by the United States are included. Each State may develop a procedure for implementing and enforcing standards of performance for new sources located within that State.

National Emission Standards for Hazardous Air Pollutants (Section 112).

A "hazardous air pollutant" is an air pollutant for which there is no applicable National Standard and which may cause or contribute to an increase in human mortality or serious illness.

EPA will publish a list of hazardous air pollutants. Hazardous air pollutants identified to date are beryllium, asbestos, mercury, vinyl chloride, and benzene. Arsenic has been suggested for inclusion.

EPA will also prescribe an emission standard for each listed pollutant or will promulgate design, equipment, or operational standards which will protect public health. Each State may develop a procedure for implementing and enforcing emission standards for hazardous air pollutants for stationary sources located in that State. The State may receive delegated authority to implement and enforce these emission standards.

Federal Enforcement (Section 113). EPA will notify anyone found to be in violation of an applicable implementation plan for their violation. EPA will also notify the State in which the violation occurs. If the violation continues, EPA may issue an order requiring the person to comply, or EPA may begin a civil action against the violator including a temporary or permanent injunction.

If EPA finds that violations are so widespread that they appear to result from a failure of the State to enforce the plan effectively, they will notify the State so corrective action can be taken.

Inspection, Monitoring, and Entry (Section 114). EPA may require the owner or operator of any emission source --

- To establish and maintain records
- To make reports
- To install, use, and maintain monitoring equipment or methods
- To sample emissions
- To provide information for the purposes of developing implementation plans, standards of performance, or emission standards and of determining whether violations of the standards or the requirements of a plan have taken place.

Each State may develop and submit a procedure to EPA for carrying out this section in their State.

International Air Pollution (Section 115). When any duly constituted international agency provides the Administrator of EPA with data showing that air pollutants emitted in the United States cause pollution in foreign countries, the Administrator will give notice to the Governor of the State in which the pollution originates. An implementation plan revision is required.

Retention of State Authority (Section 116). States can adopt standards more stringent than National Standards, but not less stringent.

Control of Pollution from Federal Facilities (Section 118). Each officer, agent, or employee of the Federal Government must comply with Federal, State, interstate, and local requirements concerning control and abatement of air pollution to the same extent that any other person must when the person is subject to the same substantive or procedural requirements. The President may grant an exemption to the requirements of this section under certain circumstances and conditions.

Noncompliance Penalty (Section 120). Regulations requiring assessment and collection of a noncompliance penalty will be promulgated. Stationary sources not in compliance with emission limitations, emission standards, or compliance schedules will be subject to penalty unless exempted for various reasons.

Consultation (Section 121). In carrying out the requirements of this Act involving implementation plans that contain any measure referred to in Part C (Prevention of Significant Deterioration of Air Quality), the State shall provide a process for consulting with local governments and any Federal land manager having authority over Federal lands to which the State plan applies.

Listing of Certain Unregulated Pollutants (Section 122). By no later than August 1978, the Administrator of EPA shall determine if aerial emissions of radioactive pollutants, cadmium, arsenic, and polycyclic organic matter will endanger public health. EPA will study, in conjunction with other appropriate agencies, the effects on public health and welfare of these pollutants and sulfates.

Interstate Pollution Abatement (Section 126). Each applicable implementation plan must require that the persons responsible for each new or modified source provide written notice to all nearby States at least 60 days prior to start of construction of that source. The Plan will also identify all major existing stationary sources which may have a similar impact and require notification of all nearby States no later than November 1977.

Public Notification (Section 127). Each State plan shall contain measures that allow public notification of any instances or areas where the primary National Ambient Air Quality Standard is exceeded or was exceeded during any portion of the preceding calendar year.

PART B - OZONE PROTECTION

Studies by the Environmental Protection Agency (Section 153). EPA will study the cumulative effects of all substances, practices, processes, and activities which may affect the stratosphere, especially the ozone in the stratosphere. EPA will establish a coordinating committee including a representative from the Department of Agriculture. Not later than January 1, 1978, and biannually thereafter, the Administrator of EPA shall report research results to the Congress.

Research and Monitoring by Other Agencies (Section 154). The Administrator of the National Oceanic and Atmospheric Administration (NOAA) shall establish a program of research and monitoring of the stratosphere. By January 1, 1978, and biannually thereafter, NOAA will report its findings to Congress and to EPA. In carrying out this research, agencies will enlist and encourage cooperation from other Federal agencies, universities, and private industry. The Secretary of Agriculture will encourage and support the research of the effects of ozone in the stratosphere upon crops, other plant life, and animals.

PART C - PREVENTION OF SIGNIFICANT DETERIORATION OF AIR QUALITY

Plan Requirements (Section 161). This Section requires that each applicable implementation plan contain emission limitations and other measures that may be necessary to prevent significant deterioration of air quality in each region or part of a region identified as a result of Section 107.

Initial Classifications (Section 162). All international parks, Wildernesses, and National Memorial Parks which exceed 5,000 acres in size and National Parks which exceed 6,000 acres in existence on August 7, 1977, and all areas redesignated Class I under regulations promulgated before this date are designated Class I, and may not be redesignated.

Increments and Ceilings (Section 163). This section requires that each applicable implementation plan contain measures assuring that maximum allowable increases over baseline concentrations for sulfur oxide and particulate matter shall not be exceeded. The maximum allowable increases over the baseline in Class I areas are:

<u>Pollutant</u>	Maximum allowable increase over baseline <u>(micrograms/cubic meter)</u>
------------------	--

Particulate matter:

Annual geometric mean 5

24-hour maximum10

Sulfur dioxide:

Annual arithmetic mean. 2

24-hour maximum 5

3-hour maximum.25

For Class II areas the maximum allowable increases over the baseline are:

<u>Pollutant</u>	Maximum allowable increase over baseline <u>(micrograms/cubic meter)</u>
------------------	--

Particulate matter:

Annual geometric mean19

24-hour maximum37

Sulfur dioxide:

Annual arithmetic mean.20

24-hour maximum91

3-hour maximum. 512

The Governor may order, after public hearings and concurrence from the Environmental Protection Agency, the concentrations of particulate matter due to increased emissions from construction or other temporary activities, or from new sources outside the U.S. do not have to be included in base-line concentrations.

Area Redesignation (Section 164). Units of Federally owned lands falling into the following categories and that are over 10,000 acres in size are designated Class II. They can be redesignated as Class I.

- National Monuments
- National Primitive Areas
- National Preserves
- National Recreation Areas
- National Wildlife Refuges
- National Lakeshores
- National Seashores

National Parks and Wildernesses established after August 7, 1977, and exceeding 10,000 acres, may only be redesignated Class I or Class II.

Any other area (not listed above or in Section 162) may be redesignated Class III by the State if it is approved by the Governor and if it will not cause allowable concentrations in other classified areas to be exceeded.

If any redesignation includes Federal lands, the State must notify the Federal land manager in writing prior to the redesignation. The Federal land manager has 60 days after notification to submit written comments and recommendations.

This Section also requires the Federal land manager to review all National Monuments, Primitive Areas, and National Preserves. By August 7, 1978, he is required to recommend to the Congress and the affected States those areas that are appropriate for Class I designation. Before making these recommendations, the Federal land manager must consult with the appropriate States.

Preconstruction Requirements (Section 165). No major emitting facility can be constructed unless a permit is applied for, reviewed, and issued. The Administrator of EPA will notify the Federal land manager and other Federal officials directly responsible for management of any lands in a Class I area which may be affected by emissions from the proposed facility. The Federal land manager will then consider whether the facility will have an adverse impact on air quality related values (including visibility). He has the affirmative responsibility to protect the air quality values. If the Federal land manager demonstrates to the satisfaction of the State that emissions from the facility will adversely impact the lands he administers, even though they do not exceed maximum allowable increases for Class I, the permit shall not be issued.

If the owner or operator of the facility demonstrates to the satisfaction and certification of the Federal land manager that emissions will have no adverse impact, even though emissions will cause or contribute to concentrations that exceed the maximum allowable increase for Class I areas, the State may issue the permit. The following are the values for maximum allowable increases over the baseline for sulfur dioxide and particulate matter to be used for these cases:

<u>Pollutant</u>	<u>Maximum allowable increase (micrograms/cubic meter)</u>
Particulate matter:	
Annual geometric mean.	19
24-hour maximum	37
Sulfur dioxide:	
Annual arithmetic mean.	20
24-hour maximum	91
3-hour maximum.	325

The Governor of a State may permit the maximum allowable increase for sulfur oxides to be exceeded up to a maximum of 18 days annually in Class I areas. The Federal land manager will be asked to concur with the Governor's decision. If agreement cannot be reached, the matter will be referred to the President for a decision. If permitted the maximum increases in sulfur dioxide over the baseline are:

<u>Period of Exposure</u>	Maximum allowable increase (micrograms/cubic meter)	
	<u>Low Terrain</u>	<u>High Terrain</u>
24-hour maximum	36	62
3-hour maximum	130	221

"High terrain areas" are defined as terrain 900 or more feet above the stack of the facility applying for the waiver.

By February 1978, EPA will establish regulations requiring an analysis of air quality, climate and meteorology, terrain, soils and vegetation, and visibility at the site of proposed major emitting facilities and in the areas potentially affected by the new emissions. By August 1978, these preconstruction reviews will include continuous air quality monitoring data collected over a period of at least one year preceding the date of application for the permit.

Other Pollutants (Section 166). EPA is required to study the pollutant hydrocarbons, carbon monoxide, photochemical oxidants, and nitrogen oxides. By August 1979, EPA must establish regulations to prevent significant deterioration of air quality. The regulations became effective one year after being established.

Enforcement (Section 167). EPA shall, and States may, take necessary measures to prevent construction of a major emitting facility which does not meet requirements of the Sections of the Clean Air Act dealing with prevention of significant deterioration of air quality. The regulations become effective one year after being established.

Definitions (Section 169). The term "major emitting facility" means any of the following stationary sources which emit, or have potential to emit, 100 or more tons/year of any air pollutant: fossil-fuel-fired steam electric plants, coal-cleaning plants, kraft pulp mills, Portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants, primary lead smelters, fuel conversion plants, sintering plants, secondary metal production facilities, chemical process plants, fossil-fuel boilers, petroleum storage and transfer facilities, taconite ore processing plants, glass fiber processing plants, charcoal production plants.

The term "baseline concentration" refers to the ambient concentration levels which exist in an area at the time the first permit application is submitted. It is based on air quality data available from EPA

or State air pollution control agencies and on monitoring data the permittee is required to submit. Emissions of sulfur oxides and particulate matter from any major facility constructed after 1975 shall not be included in the baseline.

EPA will complete a study before August 1979 and report to Congress on the progress and problems involved in carrying out regulations relating to prevention of significant deterioration. They may recommend legislative changes.

Visibility Protection for Federal Class I Areas (Section 169A). Section 169A sets a National goal to prevent future impairment of visibility resulting from manmade air pollution in Federal Class I areas. Federal land managers must identify Class I areas where visibility is an important value. A list of these areas will be published by EPA before September 1978. EPA will conduct a study of visibility by February 1979 and promulgate regulations by August 1979. Certain major stationary sources may be exempted by EPA with the concurrence of the Federal land manager. Public hearings must be held in order to revise an implementation plan to meet the requirements of this section. Before the hearings can be held, however, a representative of the State or EPA must meet in person with Federal land managers. The land managers' input must be included in EPA's notice to the public.

The term "manmade air pollution" means air pollution which results directly or indirectly from human activities. The term "visibility impairment" includes atmospheric discoloration and reduction in visual range. The term "major stationary source" includes stationary sources with the potential to emit 250 or more tons per year of any pollutant (see Section 169).

PART D - PLAN REQUIREMENTS FOR NONATTAINMENT AREAS

Definitions (Section 171). The term "reasonable further progress" means annual incremental reductions in emissions of the applicable air pollutant sufficient to provide attainment of the National Ambient Air Quality Standard by the date required in Section 172. A "nonattainment area" means an area shown, by monitored data or calculated by modeling, to exceed any National Ambient Air Quality Standard.

Nonattainment Plan Provision (Section 172). The provisions of State implementation plans, relating to attainment and maintenance of national standards in any nonattainment area, shall provide for attainment by December 31, 1982. (In the case of photochemical oxidants and carbon monoxide, attainment may be delayed until December 31, 1987.)

These plans must also provide for implementation of all reasonably available control measures. A comprehensive, accurate, and current inventory of actual emissions from all sources of each such pollutant for each such area should be included to assess the need for additional reductions.

Permit Requirements (Section 173). Permits can be issued for the construction and operation of new facilities that constitute major stationary sources. Before a permit is issued, the issuing agency must determine what the total emissions will be from existing facilities, expected new facilities that are not major emitting facilities, and the proposed facility for which the permit is sought. These expected emissions must be sufficiently less than those allowed under the implementation plan to permit reasonable progress in reaching attainment. This can involve the use of emission offsets under EPA regulations (41 Fed. Reg. 55524 - 55530, 12/21/74). If the expected total emissions are greater than those allowed under the implementation plan, the permit must be denied.

Planning Procedures (Section 174). Some regions may not be able to meet the National Primary Standard for carbon monoxide or photochemical oxidants by July 1, 1979. If this is expected, the State and elected local officials of the region shall determine which parts of a revised implementation plan will be enforced by local governments and which parts by regional agencies. This determination must be completed by February 1978.

-NOTES-

TITLE II - EMISSION STANDARDS FOR MOVING SOURCES

PART A - MOTOR VEHICLE EMISSION AND FUEL STANDARDS

Establishment of Standards (Section 202). Motor vehicle emission and fuel standards for both domestic and imported models will be established by EPA.

Prohibited Acts (Section 203). It is illegal for any person to remove or render inoperative any pollution control device from a motor vehicle prior to its delivery to the ultimate purchaser. It is also illegal for any person who is engaged in repairing, servicing, selling, trading, or leasing motor vehicles or who operates a fleet of motor vehicles to tamper with or remove an emission control device making it inoperative.

Penalties (Section 205). Civil penalties for violating Section 203 vary from \$2,500 to \$10,000.

Motor Vehicle and Motor Vehicle Engine Compliance Testing and Certification (Section 206). New motor vehicles and their engines and engine components must be tested by EPA to ensure compliance with the emission standards in Section 202. EPA will certify engines that meet the standards. This Section gives EPA authority to take action against manufacturers whose products do not meet the standards.

Compliance by Vehicles and Engines Actual Use (Section 207). Motor vehicle manufacturers must warrant that the vehicles they sell meet emission control standards. Costs of replacement or repair of emission control devices that fail within 24 months or 24,000 miles must be borne by the manufacturer.

State Standards (Section 209). No State or local government may adopt or enforce standards relating to the control of vehicle emissions unless that government had adopted the standards before March 30, 1966. The State or local government must get a waiver from the Administrator of EPA before it can enforce its standards.

Regulation on Fuels (Section 211). EPA can ban the sale of any fuel or fuel additive which may be potentially hazardous to public health. Fuels and additives may also be banned if their emission products are dangerous to public health or welfare.

Development of Low-Emission Vehicles (Section 212). Vehicles that meet established emission standards will be certified as low-emission vehicles. These certified low-emission vehicles will be acquired by purchase or lease for use by the Federal Government in lieu of non-certified vehicles provided that their costs are not more than 150 percent of that of non-certified vehicles. GSA must purchase available low-emission vehicles before considering any other vehicles.

High Altitude Performance Adjustments (Section 215). It is permissible to adjust emission control devices on vehicles being driven at high altitudes provided that the manufacturer's high altitude adjustment instructions are followed.

Carbon Monoxide Intrusion into Sustained Use Vehicles (Section 226). EPA and the U. S. Department of Transportation will study the problem of carbon monoxide intrusion into the passenger compartment of gasoline- and diesel-fueled motor vehicles. The study will include an analysis of the effects of carbon monoxide on the passengers.

PART B - AIRCRAFT EMISSION STANDARDS

Establishment of Standards (Section 231). EPA is required to study the problem of aircraft engine emissions and establish emission standards for aircraft.

Enforcement of Standards (Section 232). Aircraft emission standards are enforced by the U. S. Department of Transportation.

TITLE III - GENERAL

Definitions (Section 302). "Federal land manager" means the Secretary of the Department with authority over the lands. The term "air pollutant" means any air pollution agent, or combination of agents, which is emitted into or otherwise enters the ambient air.

Except as otherwise expressly provided, the terms "major stationary source" and "major emitting facility" mean any stationary source or any source of air pollutants which emits, or has the potential to emit, 100 or more tons per year of any air pollutant. This includes any major emitting facility or source of fugitive emissions of any pollutant as determined by EPA.

The term "person" includes any agency, department, or instrumentality of the United States as well as any United States officer, agent, or employee.

Other definitions are listed in this section that may apply in certain situations. Also, there are definitions given in specific sections of the Act that are important to those individual sections.

Emergency Powers (Section 303). In cases where State or local authorities have not acted to abate air pollution sources, EPA may bring suit to stop the emission of air pollutants which are dangerous to health. If civil action is not fast enough to assure protection to the public, the Administrator of EPA may issue orders necessary to protect the health of the people affected by the source or sources.

Citizen Suits (Section 304). Any person may file a civil suit against any other person, including the United States, who is alleged to be in violation of an emission standard or limitation or of a requirement of a permit under this Act. These suits are subject to certain time requirements and court jurisdiction limitations. This provision does not prohibit the State or local or interstate authorities from also bringing judicial or administrative action to enforce the provisions of the Act.

Federal Procurement (Section 306). No Federal agency may enter into a contract with any person who has been convicted of knowingly violating certain pollution control laws and orders. EPA will notify all Federal agencies of the names of such persons.

Policy Review (Section 309). EPA will review and comment in writing on the environmental impact of legislation proposed by any Federal agency, newly authorized Federal construction projects, major Federal actions covered by the National Environmental Policy Act of 1969, and proposed Federal regulations relating to this Act. If EPA determines that any such legislation, action, or regulation is unsatisfactory from the standpoint of health or environmental quality, EPA will publish this determination and refer the matter to the Council on Environmental Quality.

Comprehensive Economic Cost Studies (Section 312). EPA will submit an annual report to Congress on the estimated cost of carrying out the provisions of this Act. Affected units of Government are included in this estimate.

Economic Assessment (Section 317). EPA must prepare an analysis in promulgating or revising new source standards of performance, new regulations, or new emission standards. The analysis will contain:

- The cost of compliance
- The potential inflationary or recessionary effects
- The effects on competition with respect to small business
- The effects on consumer costs
- The effects on energy use

Air Quality Monitoring (Section 319). EPA must promulgate regulations by August 7, 1978, establishing an air quality monitoring system throughout the United States. This system will be designed to:

- Utilize uniform air quality monitoring criteria and methodology and measure air quality according to a uniform index
- Provide monitoring stations in major urban and other appropriate areas that will supplement but not duplicate monitoring being carried out by the States
- Provide daily analysis and reporting of air quality based on the uniform index
- Provide recordkeeping for the monitoring, periodic analysis, and reporting to the general public

The operation of the monitoring system may be carried out by EPA or other departments and agencies or entities of the Federal Government as the President may deem necessary.

Standardization of Air Quality Modeling (Section 320). EPA shall conduct a conference on air quality modeling before February 1978 and at least every 3 years thereafter. Special attention will be given to modeling that will be necessary for carrying out prevention of significant deterioration.

The National Academy of Sciences and representatives of State and local air pollution control agencies will be able to participate in these conferences. Appropriate Federal agencies, including the National Science Foundation, the National Oceanic and Atmospheric Administration, and the National Bureau of Standards, will also participate.

Interested persons will be able to submit written comments. A written transcript will be kept for each conference.

Employment Effects (Section 321). Any employee or his representative may make a written request to the Administrator of EPA to conduct a full investigation if he believes his employment will be adversely affected or threatened by the expected results of any requirement imposed or proposed to be imposed under the Act. This is true even if the requirement applies to the Federal facility.

The Administrator will then investigate and determine whether or not there are reasonable grounds for a public hearing. If there are no grounds, he must notify the person in writing and explain why there are no grounds. If there are, the Administrator will convene a hearing from which he shall make findings of fact. EPA will then make such recommendations as it deems appropriate.

Employee Protection (Section 322). The Act protects employees who discharge their duties under the Act. No one may be fired and no one may fire or discriminate against an employee because that employee:

- Started or is about to start proceeding for administration or enforcement of a requirement of the Act or applicable implementation plan
- Testified or is about to testify in such proceeding
- Assisted or is about to assist or participate in carrying out the purpose of this Act

Any employee who believes he has been fired or discriminated against may file a complaint with the Secretary of Labor within 30 days of the alleged violation.

National Commission on Air Quality (Section 323). The Act establishes an 11-member National Commission on Air Quality to study a wide variety of air quality issues and to report their findings to the Congress. A point of immediate interest is that the Commission must study and report to the Congress on the effects of the prevention of significant deterioration section of the Act by August 7, 1979. EPA will execute an agreement with the National Academy of Sciences to study this same topic and report by the same date.

Executive department and agency heads are required to cooperate with and furnish information to the Commission so it can do its job.

The Commission must submit a final report, regarding all of the studies it is charged to accomplish, by August 7, 1980. The Commission will disband on August 7, 1980, or with the submission of its final report, whichever is earlier.

TITLE IV - GENERAL AND MISCELLANEOUS PROVISIONS

Interagency Cooperation on Prevention of Environmental Cancer and Heart and Lung Disease (Section 402). A continuing task force of representatives of EPA, the National Cancer Institute, the National Institute of Occupational Safety and Health, the National Institute on Health Sciences, and the National Heart, Lung, and Blood Institute has been formed to study and report annually to the Congress on research, strategies, coordination, and cooperation needed to prevent environmentally related cancer and heart and lung diseases.

Studies (Section 403). EPA must make the following studies and report to the Congress:

- The relationship between the size, weight, and chemical composition of suspended particulate matter and the degree and nature of endangerment to public health and welfare and the availability of control technology. This must be finished by January 1979.
- A list containing the approximate number of cases, range of levels found, and mean levels found of all known chemical contaminants resulting from environmental pollution which have been found in human tissue including blood, urine, breast milk, and other tissue by August 1978.
- An explanation by January 1979, of what is known about the manner in which the chemicals in the list prepared above entered the environment and human tissue.

EPA will also conduct a study in various areas throughout the country to analyze the contribution of liquid and solid aerosols and other fine particulate matter to visibility and health problems. The areas are not specified nor has a time been set for the study to be completed.

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